al and Cohn), in order to obtain the claimed features <u>in the manner claimed</u>. "Teachings of references can be combined <u>only</u> if there is some suggestion or incentive to do so." *In re Fine*, 5 USPQ2d 1596,1600 (Fed. Cir. 1988) (quoting *ACS Hosp. Sys. v. Montefiore Hosp.*, 221 USPQ 929, 933 (Fed. Cir. 1984)) (emphasis in original).

The Examiner is reminded that an obviousness rejection requires a <u>specific showing</u> as to why one of ordinary skill in the art would have selected the components for combination <u>in the manner claimed</u>.[1] "The examiner's conclusory statements ... do not adequately address the issue of motivation to combine. This factual question of motivation is material to patentability, and [cannot] be resolved on subjective belief and unknown authority. It is improper, in determining whether a person of ordinary skill would have been led to this combination of references, simply to '[use] that which the inventor taught against its teacher.'" *In re Lee*, 61 USPQ2d at 1434 (*quoting W.L. Gore v. Garlock, Inc.,*, 202 USPQ 303, 312-13 (Fed. Cir. 1983)).

As demonstrated in further detail below, the Examiner's assertions of motivation to modify are ill-founded and inconsistent with the explicit teachings of the references[2], such that one skilled in the art would have <u>not</u> have been motivated to modify the references, as asserted.

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[1]*Cf. In re Lee*, 61 USPQ2d 1430, 1433-34 (Fed. Cir. 2002) (*quoting In re Kotzab*, 217 F.3d 1365, 1371, 55 USPQ2d 1313, 1317 ("particular findings must be made as to the reason the skilled artisan, with no knowledge of the claimed invention, would have selected these components for combination <u>in the manner claimed</u>")(emphasis added); *In re Rouffet*, 149 F.3d 1350, 1357, 47 USPQ2d 1453, 1458 (Fed. Cir. 1998) ("the examiner must show reasons that the skilled artisan, confronted with the same problems as the inventor and with no knowledge of the claimed invention, would select the elements from the cited prior art references for combination <u>in the manner claimed</u>.")(emphasis added).

[2]Although the test for establishing an implicit motivation in the prior art is what a prior art statement would have suggested to those of ordinary skill, such a statement "must be considered *in the context of the teaching of the entire reference.*" *In re Kotzab*, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000).

A. Independent Claims 1, 13, 25, and 37

Each of the independent claims 1, 13, 25, and 37 specify an arrangement for displaying display elements within respective distinct non-overlapping display areas of a display screen of a network-enabled user interface device. In particular, each of the independent claims 1, 13, 25 and 37 specify receiving display *requests from executable application resources*, including at least one via an open protocol network. Each of the independent claims 1, 13, 25 and 37 also specify selecting the display elements to be displayed, *in each of the display areas*, based on *arbitrating the display requests that are received from the executable application resources*. For example, claim 1 specifies a network-enabled user interface device that includes:

> a display screen configured for displaying display elements within respective distinct display areas;
>
> ...
>
> an application controller configured for *obtaining display requests from executable application resources* ...
>
> an interface controller configured for partitioning the display screen into the distinct display areas, thereby preventing any of the display areas from ever overlapping another one of the display areas, and outputting the display elements for the respective distinct display areas, the interface controller including *an arbitrator configured for selecting, from the display requests, the display element for each corresponding display area* based on at least one of a corresponding determined condition and a determined presence of a selected one of the user inputs.

Claims 13, 25, and 37 (according to means plus function language) specify:

> *receiving application-based display requests from executable application resources*, at least a portion of the display requests received via an open protocol network;
>
> *selecting display elements to be displayed within respective distinct display areas of a display screen, based on arbitrating the display requests* relative to at least one of a corresponding determined condition and a determined presence of a selected user input;
>
> partitioning, by the network-enabled user interface device, the display screen into the distinct display areas thereby preventing any of the display areas from ever overlapping another one of the display areas; and
>
> outputting the display elements for display within the respective distinct display areas.

Hence, each of the independent claims specifying selecting the display elements to be displayed for <u>each of the display areas of the display screen</u> based on *arbitrating the display requests*, wherein the display requests are received from *executable application resources*. Consequently, the arbitration enables *the network-enabled user interface device* to retain control of the presentation of the display content to the user <u>in each display area</u>, while receiving display requests from multiple executable application resources, including from executable application resources via an open protocol network (See, e.g., page 4, lines 26 to page 5, line 4 of the specification). Hence, arbitration of display requests <u>received from application resources</u> can be performed by selecting the display element, from the display requests, on a per-display area basis:

> The disclosed embodiment is directed to an arrangement for controlling the display of a user interface device based on generation of display elements for <u>respective display areas</u>, where display requests are <u>arbitrated to select the appropriate display element for each corresponding display area</u>. Hence, the use of arbitration for prescribed display areas enables use of a message-based display arrangement, where executable application resources, executed locally within the user interface device or remotely on the open protocol network, can send display requests for application objects to be displayed. Hence, the use of arbitration enables the display to be *dynamically adjusted* based on the received display requests, user inputs, or asynchronous events detected by the user interface device.

In addition, *any* application resource can send a display request for *any one of the display areas*, in order to request display of an application object within a specified display area (see page 12, lines 22-24). The above-described features also enable a user display to be dynamically controlled with minimal complexity, and <u>without the necessity of a pointing device such as a mouse</u>.

These and other features and advantages are neither disclosed nor suggested in the applied prior art.[3]

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[3]An evaluation of obviousness must be undertaken from the perspective of one of ordinary skill in the art addressing the same problems addressed by the applicant in arriving at the claimed invention. *Bausch & Lomb, Inc. v. Barnes-Hind/Hydrocurve*, 23 USPQ 416, 420 (Fed. Cir. 1986), *cert. denied*, 484 US 823 (1987). Thus, the claimed structures and methods cannot be divorced from the problems addressed by the inventor and the benefits resulting from the claimed invention. *In re Newell*, 13 USPQ2d 1248, 1250 (Fed. Cir. 1989).

B. Pietrowitz et al.

As admitted on page 3 of the Final Action, Pietrowicz et al. does not disclose or suggest the claimed interface controller that is configured for partitioning the display screen into distinct display areas (thereby preventing any of the display areas from ever overlapping one onother), and outputting the display elements for the respective distinct display areas. The Final Action also admits that Pietrowicz et al. does not disclose or suggest an interface controller having the claimed arbitrator for selecting, *from the display requests*, the display element *for each corresponding display area*, as claimed.

In fact, Pietrowicz et al. does <u>not</u> teach the claimed application controller configured for receiving the claimed "*display requests*", as asserted by the Final Action. Rather, Pietrowicz et al. teaches that the application controller 110A "<u>relays</u> feature based *information* <u>received from the PSTN and VoP interfaces</u> to the user I/O devices for display" (para. 27, lines 7-9). In fact, Pietrowicz et al. <u>explicitly specifies</u> that the LCD display 122 displays "dialed digits and *feature-related call information*" (para. 25, lines 1-4), the feature-related call information including "calling number/name, time, date, and message waiting indications, *received from either network interface*" (para. 36, lines 5-7).

As disclosed in the specification, the claimed "display request" is <u>not</u> simply display data (i.e., data to be displayed on a display screen), but refers to a <u>command</u> for performance of a GUI operation, for example in the form of an application state to be performed (see, e.g., page 7, lines 11-13; page 9, lines 1-8). In addition, the claims explicitly specify selecting the *display <u>elements</u> based on arbitration from among the display <u>requests</u>.*

Further, the Examiner has failed to provide any evidence suggesting one skilled in the art would interpret the claimed "display *request*" as broadly as the "display *data*" disclosed in Pietrowicz et al. Hence, the claimed "display request" <u>cannot</u> be so broadly construed as to encompass "display *data*": the broadest *reasonable* interpretation must be (1) consistent with the

specification, and (2) consistent with the interpretation that those skilled in the art would reach.[4]

Hence, Pietrowicz et al. does <u>not</u> teach reception of *"display requests"*, as claimed, but teaches no more than reception for the display of "feature-related call information".

C. No Evidence of any Motivation to Modify Pietrowicz et al. to Include Uchida

At this stage of the §103 rejection, the Examiner is required to present <u>evidence</u> that one having ordinary skill in the art would have been motivated to modify Pietrowicz et al, as asserted. *In re Fine* at 5 USPQ2d 1600.

The Final Action asserted on pages 3-4 that:

> [i]t would have been obvious to one of ordinary skill in the art to have modified Pietrowicz with the features of the GUI controller as taught by Uchieda [sic] ... because Uchieda [sic] provides a system and method for supporting *development of application windows* and more particularly, to *development supporting system* and method which utilize a client / serve [sic] system for *an application constructed of application windows* using graphical user interface GUI controls (col. 1, lines 6-11)...."

However, the fact that Uchida provides a system for *software development* (i.e., *"development* of application windows) does not address the legally-required inquiry as to whether one skilled in the art would have been motivated to modify *Pietrowicz et al*, because Pietrowicz et al. discloses a **desktop appliance that interfaces to both the PSTN and a packet network including user I/O, analog telephony functionality, and Voice over IP telephony** (Abstract), and has <u>no concern whatsoever with software development</u>: even the Title of Pietrowicz et al. demonstrates his device to be concerned with *telephony* ("INTERCONNECTING VOICE-OVER-

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PACKET AND ANALOG TELEPHONY AT A DESKTOP"), and provides <u>no reference whatsoever</u> to application programming and design (i.e.,application development).

The Final Action also fails to identify why one skilled in the art would have any motivation whatsoever to add the technology of *developing an application* (that will utilize multiple application windows) into a desktop appliance intended for "[integrating] *traditional analog telephony with VoP telephony at the desktop* and reduces the amount of equipment on a consumer's desk, simplifies the management of multiple phones, and allows the analog and packet workds to be interconnected...." (Para. 7 at lines 2-6).[5]

D. The Official Action Fails to Establish Uchida as Analogous Art

The Examiner has failed to demonstrate that Uchida is analogous art: page 5 of the June 1, 2005 Office Action argues that Uchida should be analogous art because "the user interface for development of application window is well known in the art and *can be used for different display systems such as PC or networking display.*" This argument, however, is legally inadequate because it does not address the <u>legal requirements of:</u> (1) being within the <u>field of applicant's endeavor;</u> or (2) *reasonably pertinent* to the particular problem with which the inventor was concerned. *In re Oetiker*, 24 USPQ2d 1443, 1445 (Fed. Cir. 1992).

D.1. Uchida is Not Within the Inventors' Field of Endeavor

The Examiner has failed to provide <u>a positive statement</u> as to what is believed by the Examiner to be the Field of Endeavor for *the claimed subject matter*. The Federal Circuit has made it clear that the test for analogous art "requires the *PTO* to determine the appropriate field of endeavor." *In re Bigio*, 72 USPQ2d 1209, 1212 (Fed. Cir. 2004) ("the PTO must show adequate support for its findings on the scope of the field of endeavor in the application's written description

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[5]"The mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification." *In re Fritch*, 23 USPQ2d 1780, 1783-84 (Fed. Cir. 1992). *In re Mills*, 16 USPQ2d 1430 (Fed. Cir. 1990).

and claims, including the structure and function of the claimed invention."). Any statements characterizing the field of Uchida et al. are meaningless until the Examiner *explicitly states* what the Examiner believes to be *Applicant's* field of endeavor.

As admitted by the Examiner, Uchida states his field to be "supporting *development* of application windows", whereas the subject application states the Field at page 1, lines 2-3 to be "control of display data on network enabled user devices, *for example Voice over IP Telephones*, configured for displaying data for *multiple service operations*." Neither the claimed invention nor Pietrowitz et al have any relevance to application development involving *development* of application windows for an application; further Uchida has no relevance to control of display data on a network enabled user interface device *configured for displaying data for multiple application services*.

In fact, nothing in Uchida suggests it is applicable at all during execution of the application under development!

D.2. Uchida is Not Reasonably Pertinent to the Problem Addressed

The Examiner also has failed to identify how Uchida could be considered *reasonably pertinent* to the particular problem the inventors of the claimed invention were attempting to solve (as specified on pages 2-3 of the specification). The Federal Circuit has admonished the PTO that "it is necessary to consider 'the reality of the circumstances' – in other words, *common sense* – in deciding in which fields a person of ordinary skill would *reasonably* be expected to look for a solution to the problem facing the inventor." *Oetiker* at 1446 (emphasis added, citations omitted) (holding PTO failed to demonstrate person of ordinary skill would reasonably have been motivated to look to fasteners for garments to solve problem of fastening a hose clamp).

Further, the rejection fails to demonstrate Uchida as *reasonably* pertinent:

> A reference is reasonably pertinent if, even though it may be in a different field from that of the inventor's endeavor, it is one which, because of the matter with which it deals, *logically would have commended itself to an inventor's attention in considering his problem*. Thus, the purposes of both the invention and the prior art are important in determining whether the reference is reasonably pertinent to the problem the invention attempts to solve.

In re Clay, 23 USPQ2d 1058, 1061 (Fed. Cir. 1992) (*cited by In re Bigio*, 72 USPQ2d at

1212).

Uchida is directed to supporting development of <u>application windows</u> in a GUI-based application development environment (see, e.g., Abstract and col. 1, lines 5-25), and has no relevance to the particular problem with which the inventors were involved, namely providing display of multiple application services on a network-enabled user device, in a manner that enables the device to retain control of the presentation of the display content to the user, <u>and without the necessity of overlapping window regions that require a pointing device</u>.

In fact, Uchida is <u>explicitly contrary</u> to the inventors' stated needs, since Uchida <u>explicitly relies on</u> overlapping window regions (see, e.g., overlapping areas 502 of Fig. 5), and <u>explicitly relies on a pointing device</u> for GUI based operations such as dragging and dropping an icon (col. 6, lines 6-10). Uchida is directed to a different purpose, namely to "improve the efficiency of *development of application windows* so as to improve the *efficiency of development of the application program*." (Col. 2, lines 20-22). As noted by the Federal Circuit, if the reference "is directed to a different purpose, the inventor would accordingly have had less motivation or occasion to consider it." *In re Clay*, 23 USPQ2d at 1061.

E. Uchida Does Not Teach or Suggest Arbitration, As Claimed

Even if Uchida would have been considered by one skilled in the art, Uchida provides no disclosure or suggestion of *arbitrating* between different *display requests* intended for a <u>corresponding display area</u> of a display having <u>distinct display areas</u>, as claimed.

The specification illustrates the claimed arbitration by the arbitrator 48 of Figs. 2 and 3, where display requests either are executed immediately, or cached (page 11, lines 19-22); in particular, the specification describes the arbitrator as applying rules (i.e., heuristics) for determining which display elements are to be displayed, including display elements that form a compilation of multiple display requests (page 13, line 3 to page 14, line 15).

Hence, claimed arbitration cannot be so broadly construed as to encompass a simple <u>user selection</u>, as such an interpretation would inconsistent with the specification, inconsistent with the

interpretation those skilled in the art, and therefore unreasonable.

Uchida describes a client/server system that enables a user to input (i.e., define) GUI control property defining information (or development information) for an application window using an a definer resource 204, and store the GUI control property defining information as a data structure 201 in the server 101 (see, e.g., col. 4, lines 3-32 and 36-44). The element 205 in Uchida refers to an "information selector" (GUI control property defining information selector") which enables a user to select from the stored data structures, namely one of the available *server-stored* GUI information 201 (in the form of **letter font/size, line width, line type**) (col. 4, lines 21-29): if a given data structure 201 is selected by the information selector 205, a user can decide to set a *flag* in order to *utilize* the selected GUI control property defining information 201 during application window editing (see, e.g., col. 4, lines 55-65); however, when the flag is not set, then server-stored information 201 is not used, and instead default values of the application window development tools are applied (see, e.g., col. 4, lines 44-64; col. 5, lines 28-42; col. 6, lines 22-32 and col. 6, line 65 to col. 7, line 10).

Hence, there is no selection from *display requests*, as claimed; rather, Uchida refers to selection of GUI information 201 which is implemented in the form of letter font/size, line width, line type, etc. In contrast, the claims specifying arbitrating based on selecting, from the display *requests*, the *display elements*. Hence, the display *elements* are selected based on arbitration of the *display requests*.

Uchida simply selects GUI information such as letter font/size, line width, line type based on selection by the user, and not based on any arbitration of display *requests*.

Moreover, the selector 205 is used in order to enable a user to *edit the properties of the application window* **as defined by the selected GUI control property defining information 201** (note the definer 204 provides the intial defining (i.e., creation) of the information 201) (col. 4, lines 37-47; col. 5, lines 28-42 and 47-57).

In addition, Uchida does not disclose or suggest that display requests are received from *executable application resources*, rather the GUI information 201 is a static data structure 201 that is stored in the server for *retrieval by the selector 205*.

Hence, the selector 205 is not a teaching of the claimed arbitration of display requests, but

rather describes *selecting* a **stored data unit 201** in order for a <u>user</u> to edit the properties in the selected data unit 201.

Further, Uchida teaches away from the claimed arbitration by relying on a <u>flag</u> 207 to indicate whether server-stored GUI information 201 should be used during application window editing, or whether default settings of the application window development tools should be used. Moreover, the flag is used to indicate whether *server-stored* GUI information 201 should be used, or *default settings* of the development tools: there is no disclosure or suggestion of arbitrating between <u>display requests</u> from executable application resources, at least a portion of the display requests from executable application resources <u>via an open protocol network</u>.

One skilled in the art would not have been motivated to modify the *telephony apparatus* of Pietrowicz et al. to include the *application development system* of Uchida. As described above, the field of Uchida (application window development) is <u>incompatible</u> with the display device 122 of Pietrowicz et al., especially since the display 122 of Pietrowicz et al. is configured for "displaying dialed digits and feature-related <u>call information</u>" (see paragraph 25, lines 2-4). Moreover, <u>all</u> service-related data presented to the LCD display 122 is via the analog call processor 222 or the VoP call processor 226 (see, e.g., paragraphs 38-39). There is no indication of how the hypothetical combination could be operable if the device of Pietrowicz et al. was modified as suggested by the Examiner.

Hence, modifying Pietrowicz et al. to include the teachings of Uchida would change the principle operation of Pietrowicz et al. from an integrated desktop telephony appliance to an *application development tool*, and render it unsatisfactory for its intended purpose of integrating <u>analog and Voice over IP telephony protocols</u>. "If the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims prima facie obvious." MPEP § 2143.02, Rev. 2, May 2004 at p. 2100-132 (<u>Citing</u> <u>In re Ratti</u>, 270 F.2d 810, 123 USPQ 349 (CCPA 1959). "If the proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification." <u>Id</u>. (<u>Citing</u> <u>In re Gordon</u>, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984)).

F. Cohn

Cohn describes an interface 200 (Fig. 6) configured for creating and managing partitions (i.e., panes) 210, 211, 212 in a display 140, and *assigning to each pane a corresponding application* (e.g., 150, 151, 152); other applications 160 controlled by another interface 170 are either in a distinct region (outside the control of the 200) or hidden (see, e.g., col. 10, lines 36-53).

Hence, Cohn consistently teaches that an application is *assigned to a pane* (e.g., col. 8, lines 34-35; col. 10, lines 36-53; col. 34, lines 46-50 and 59-61): one skilled in the art thus would appreciate that once an application is assigned to a pane, then no arbitration is possible because the *assigned application* determines the display elements to be supplied with the corresponding assigned pane. Any subsequent reassignment of the application to *another pane*, or replacing an application assigned to a pane with a new application assigned to the pane still results in no arbitration, because Cohn is concerned with application *assignment* to a pane, and not arbitration of display requests from multiple applications, as claimed.

G. Hypothetical Combination Does Not Teach or Suggest Claimed Invention as a Whole

Hence, the supposed motivation to add Cohn as asserted by the Examiner is improper ("Cohn further provides different windows simultaneously display information available to the user so that the user can interactive [sic] with the multiple windows on the screen"), because it disregards the explicit teachings of Cohn which specify that the interface 200 assigns an application to a corresponding pane, which *precludes* the ability of arbitration among *display requests from multiple executable application resources* in order to select, from the display requests, the display element for each corresponding display area. Although the test for establishing an implicit motivation in the prior art is what a prior art statement would have suggested to those of ordinary skill, such a statement "must be considered *in the context of the teaching of the entire reference.*" *In re Kotzab,* 55 USPQ2d 1313, 1317 (Fed. Cir. 2000).

Hence, the hypothetical combination of Pietrowitz et al., Uchida et al., and Cohn would result in distinct display areas driven by *respective assigned applications* that preclude centralized

arbitration, as claimed.

The Federal Circuit has made clear that "<u>particular findings</u> must be made as to the reason the skilled artisan, with no knowledge of the claimed invention, would have selected these components for combination <u>in the manner claimed</u>." *In re Kotzab*, 55 USPQ2d at 1317. The showing of evidence of a suggestion, teaching or motivation to modify the references must be "clear and particular", else the rejection" simply takes the inventor's disclosure as a blueprint for piecing togehter the prior art to defeat patentability – the essense of hindsight." *In re Dembiczak*, 50 USPQ 1614, 1617 (Fed. Cir. 1999).

As apparent from the foregoing, the §103 rejection of the independent 1, 13, 25, and 37 claims is replete with inconsistencies, ill-founded assumptions and assertions that lack any evidentiary or legal basis. No *particular findings* as to motivation to modify has been set forth in the rejection, rather the rejection relies on a piecemeal application of references, including ***non-analogous references***, that demonstrate the essence of hindsight.

For these and other reasons, the §103 rejection of independent claims 1, 13, 25, and 37 must be withdrawn.

In view of the above, it is believed this application is in condition for allowance, and such a Notice is respectfully solicited.

To the extent necessary, Applicant petitions for an extension of time under 37 C.F.R. 1.136. Please charge any shortage in fees due in connection with the filing of this paper, including any missing or insufficient fees under 37 C.F.R. 1.17(a), to Deposit Account No. 50-1130, under Order No. 95-469, and please credit any excess fees to such deposit account.

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